

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
5 August 2004 (05.08.2004)

PCT

(10) International Publication Number  
WO 2004/065700 A1

(51) International Patent Classification<sup>7</sup>: E02F 3/92, 5/00

(21) International Application Number:  
PCT/GB2004/000309

(22) International Filing Date: 26 January 2004 (26.01.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
0301660.7 24 January 2003 (24.01.2003) GB

(71) Applicant and

(72) Inventor: REDDING, John [GB/GB]; Fleche Cottage,  
Old Town Hall, Lamberhurst, Kent TN3 8EN (GB).

(74) Agent: BROOKES BATCHELLOR LLP; 102-108  
Clerkenwell Road, London EC1M 5SA (GB).

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,

CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

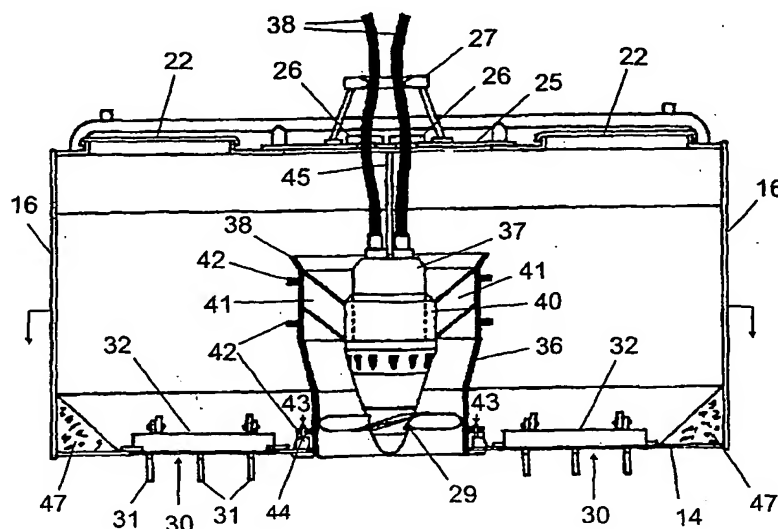
(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), Euro-  
pean (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR,  
GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,  
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,  
ML, MR, NE, SN, TD, TG).

**Published:**

- with international search report
- before the expiration of the time limit for amending the  
claims and to be republished in the event of receipt of  
amendments

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: UNDERWATER SEDIMENT MANAGEMENT



(57) Abstract: The present invention relates to underwater sediment management. In particular, we will describe dredging and scouring apparatus for removing sand, silt, clay and like materials from sea or river beds. There is described an apparatus comprising a body (10) having a bottom face (13, 14) and comprising an outlet flow path (28) in which is mounted propeller thrust means (29) to direct, in use, a swirling jet of water downwards towards an area of sea or river bed or the like, orientation means (48, 49) to connect said apparatus, in use, to a support means to orientate said apparatus with respect to the sea or river bed, and at least one inlet flow path (30) through which water is supplied, in use, to the propeller thrust means (29); characterised in that the inlet (30) and outlet (28) flow paths are provided with respective openings in the bottom face (13, 14) of the body. In the preferred embodiments, the inlet and outlet flow paths are parallel, but of opposite directions.

WO 2004/065700 A1